## Abstract

The present invention relates to:

- a process for the crosslinking of at least one polymer selected from polysaccharides and derivatives thereof, which is carried out in an aqueous solvent by the action of an effective and non-excessive amount of at least one crosslinking agent, characterized in that it is carried out on a mixture containing at least one low-molecular weight polymer and at least one high-molecular weight polymer;
- a process for the preparation of an injectable monophase hydrogel of at least one crosslinked polymer selected from polysaccharides and derivatives thereof; and
  - the crosslinked polymers and injectable monophase hydrogels respectively obtainable by each of said processes.